Patent No. 6,777,241 Request for Cert. of Correction dated January 4, 2005 Attorney Docket No. 4521-011622

10/009226

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

atent No.

6,777,241 (confirmation No. 5569)

Inventors

Naumann et al.

Issued

August 17, 2004

Title

Method For Diagnosing TSE-Induced Changes

Certificate JAN 1 4 2005 of Correction

In Tissues Using Infrared Spectroscopy

Examiner

Customer No.

Yelena G. Gakh

28289

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR PTO MISTAKE (37 C.F.R. 1.322(a))

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ATTENTION:

**Decision and Certificate of Correction Branch** 

Patent Issue Division

Sir:

In accordance with 35 U.S.C. §254, we attach hereto Form PTO/SB/44 and a copy of proof of PTO errors and request that a Certificate of Correction be issued in the above-identified patent. The following errors appear in the patent as printed:

Face of Patent, See Item (22) "PCT filed: Mar. 5, 2000" should read -- May 3, 2000--(See the "PCT Notification of Transmittal of Copies of Translation of the International Preliminary Examination Report" dated 18 December 2001.)

Face of Patent, See Item (75) Inventors: "Elizabeth Baldauf, Dallgow (DE); and Michael Beekes, Dallgow (DE)" should read: --Elizabeth Baldauf, Falkensee (DE) and Michael Beekes, Falkensee (DE)--

(The third and fifth named inventors' towns of residence are incorrect. See the Official Filing Receipt dated 03/28/2002.)

Face of Patent, See Item (56) References Cited, Column 2, under OTHER PUBLICATIONS, first article by Choo et al., line 3, "Biospectroscpy" should read --Biospectroscopy--

(See Form PTO-892 accompanying the Office Action dated 12/31/2003. This was a typographical error by the Examiner.)

Face of Patent, See Item (56) References Cited, Column 2, under OTHER PUBLICATIONS, second article by Budinova al., line 3, "433 445" should read --443--445--

(See Form PTO-892 accompanying the Office Action dated 12/31/2003. This was a typographical error by the Examiner.)

- <u>Face of Patent</u>, See Item (56) References Cited, Column 2, under OTHER PUBLICATIONS, third article by Caughey et al., "Scrapic-Associated" should read --Scrapie-Associated--
- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 1 of 6, Reference AQ.)
- Face of Patent, Page 2, Column 1, under OTHER PUBLICATIONS, first article to Helm et al., line 2, "Spectra Libraries" should read —Spectral Libraries—(See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 2 of 6, Reference AS.)
- Face of Patent, Page 2, Column 1, under OTHER PUBLICATIONS, third article to Schmerr et al., line 2, "sheep Using" should read --Sheep Using-- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 3 of 6, Reference AR.)
- <u>Face of Patent</u>, **Page 2**, Column 1, under OTHER PUBLICATIONS, seventh and last article to Otto et al., line 1, "Creutzfeldz-Jacob" should read --Creutzfeldt-Jakob-- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 4 of 6, Reference AS.)
- <u>Face of Patent</u>, **Page 2**, Column 2, under OTHER PUBLICATIONS, first article to Zerr et al., line 2, "Creutz-Jakob" should read --**Creutzfeldt**-Jakob-- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 5 of 6, Reference AQ.)
- Face of Patent, Page 2, Column 2, under OTHER PUBLICATIONS, second article to Zerr et al., line 3, "The Lance" should read --The Lancet -- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 5 of 6, Reference AQ.)
- Face of Patent, Page 2, Column 2, under OTHER PUBLICATIONS, second article to Otto et al., line 2, "Journals of Neuro Virology" should read --Journal of Neuro Virology -- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 5 of 6, Reference AR.)
- Face of Patent, Page 2, Column 2, under OTHER PUBLICATIONS, third article to Safar et al., line 1, "Eight Prion Have" should read --Eight Prion Strains Have--(See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 5 of 6, Reference AS.)
- Face of Patent, Page 2, Column 2, under OTHER PUBLICATIONS, fifth article to Lasch et al., line 2, "SPEC" should read --SPIE-- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 6 of 6, Reference AR.)
- Face of Patent, Page 2, Column 2, under OTHER PUBLICATIONS, sixth and last article to Choo et al., line 2, "Synchrotron Pourier" should read --Synchrotron Fourier-- (See Information Disclosure Statement of 07/15/2002, Form PTO-1449, page 6 of 6, Reference AS.)

Column 2, line 36, before the paragraph beginning "It is an object of this invention", add the title --SUMMARY OF THE INVENTION-- (See Preliminary Amendment dated 11/08/2001, page 2)

Column 7, line 51, Claim 1, "encenhalopathies" should read --encephalopathies--

(See Amendment dated 03/30/2004, page 3, Claim 11, line 2. Claim 11 issued as Claim 1.)

Column 7, line 53 Claim 1, "encegalopathies (BSE," should read
--encephalopathies (BSE)-(See Amendment dated 03/30/2004, page 3, Claim 11, line 3, Claim 1

(See Amendment dated 03/30/2004, page 3, Claim 11, line 3. Claim 11 issued as Claim 1.)

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.

Richard L. Byrne

Registration No. 28,498 Attorney for Registrants 700 Koppers Building 436 Seventh Avenue

Pittsburgh, PA 15219-1818 Telephone: (412) 471-8815 Facsimile: (412) 471-4094

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. :

6,777,241 B

DATED

August 17, 2005

INVENTOR(S) :

Naumann et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Face of Patent, See Item (22) "PCT filed: Mar. 5, 2000" should read -- May 3, 2000--

<u>Face of Patent</u>, See Item (75) Inventors: "Elizabeth Baldauf, Dallgow (DE); and Michael Beekes, Dallgow (DE)" should read: --Elizabeth Baldauf, **Falkensee** (DE) and Michael Beekes, **Falkensee** (DE)--

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{W0161109.1}

MAILING ADDRESS OF SENDER:

The Webb Law Firm 700 Koppers Building 436 Seventh Avenue

Pittsburgh, PA 15219-1818

PATENT NO.\_\_

6,777,241

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 $\Rightarrow$ 

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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6,777,241 BI

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{W0161109.1}

VA 22313-1450.

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PATENT NO.\_

6,777,241

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(Also Form PTO-1050)

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO.

6,777,241 B)

DATED

August 17, 2005

INVENTOR(S) :

Naumann et al.

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PATENT NO. 6,777,241

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## PATENT COOPERATION TREATY

## **PCT**

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 72.2)

From the INTERIOTIONAL WIRWADIAT

To: Patentanwalt

0.2. Jan. 2002

WABLAT, Wolfgang
Potsdamer Chaussee 48

D-14129 Berlin
ALLEMAGNE

Date of mailing (day/month/year)

18 December 2001 (18.12.01)

Applicant's or agent's file reference

RKO - 15 626 WO

International application No.

PCT/DE00/01404

**IMPORTANT NOTIFICATION** 

International filing date (day/month/year) 03 May 2000 (03.05.00)

Applicant

ROBERT-KOCH-INSTITUT et al

## 1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

2. Transmittal of the copy of the translation to the elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

AU,CA,CN,JP,KP,KR,NZ,US

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AP,EA,EP,AE,AG,AL,BA,BB,BG,BR,CR,CU,CZ,DM,DZ,EE,GD,GE,HR,HU,ID,IL,IN,IS,LC,LK,LR,LT,LV,MA,MD,MG,MK,MN,MX,NO,PL,RO,SG,SI,SK,TR,TT,UA,UZ,VN,YU,ZA,ZW,OA

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

**Authorized officer** 

Sangeeta JAIYA

Facsimile No. (41-22) 740.14.35

Telephone No. (41-22) 338.83.38



## United States Patent and Trademark Office

COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 20231

							www.uspio.gov
APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/009,226	03/06/2002	3736	510	2364-	5	20	1

011622

Richard L Byrne 700 Koppers Building 436 Seventh Avenue Pittsburgh, PA 15219-1818



**CONFIRMATION NO. 5569** 

**FILING RECEIPT** 

\*OC000000007677531\*

Date Mailed: 03/28/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE. NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Dieter Naumann, Berlin, GERMANY; Janina Kneipp, Berlin, GERMANY; Elizabeth Baldauf, Falkensee, GERMANY: Peter Lasch, Berling, GERMANY; Michael Beekes, Falkensee, GERMANY;

#### Domestic Priority data as claimed by applicant

THIS APPLICATION IS A 371 OF PCT/DE00/01404 03/05/2000

### Foreign Applications

GERMANY 199 23 811.1 05/20/1999

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

RECEIVED WEBB, ZIESENHEIM, LOGSDON, Projected Publication Date: Not Applicable, filed prior to November 29,2000 ORKIN, & HANSON PC APR - 1 2002

Title

Method for diagnosing tse-induced changes in tissues using infrared spectroscopy

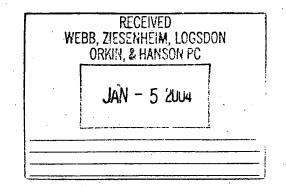


## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/009,226	03/06/2002	Dieter Naumann	2364-011622	5569
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Richard L By 700 Koppers B		4.7	GAKH, YE	LENA G
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Pittsburgh, PA	15219-1818	<i>ī.)</i>	1743	
	N. C.	PADEMARY ST	DATE MAILED: 12/31/2003	3

Please find below and/or attached an Office communication concerning this application or proceeding.



# JAN 1 0 2005

Application/Control No. 10/009,226

Applicant(s)/Patent Under Reexamination NAUMANN ET AL.

Examiner

Yelena G. Gakh, Ph.D.

Art Unit 1743

Page 1 of 1

### **U.S. PATENT DOCUMENTS**

*	No.	Dog Orient Number  The property de-Number-Kind Code	Date MM-YYYY	Name	Classification
	А	US-6,399,314	06-2002	Krishnamurthy, Girija	435/7.1
	В	US-		·	
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	D	US-			
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#### FOREIGN PATENT DOCUMENTS

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#### **NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Choo et al. "Infrared spectra of human central nervous system tissue: diagnosis of Alzheimer's disease by multivariate analyses", Biospectroscpy, 1995, v. 1, No. 2, pp. 141-148, Abstract
	(v)	Budinova et al. "Utilization of infrared spectroscopy in the study of human tissues", Chemicke Listy, 1996, v. 90, No. 7, pp. 433 445, Abstract
	w	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



## PATENT APPLICATION Serial No. 10/009,226 Atty. Docket No. 2364-011622

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Confirmation No. 5569

Group Art Unit 3736

In re application of

Dieter NAUMANN et al.

Serial No. 10/009,226

Filed March 6, 2002

METHOD FOR DIAGNOSING

TSE-INDUCED CHANGES IN TISSUES USING INFRARED

**SPECTROSCOPY** 

Pittsburgh, Pennsylvania July 15, 2002

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

Pursuant to the requirements of 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants hereby submit this Information Disclosure Statement, which includes a completed Form PTO-1449.

This application is in the national phase of International Application No. PCT/DE00/01404, filed May 3, 2000, which corresponds with German Patent Application No. 199 23 811.1, filed May 20, 1999.

The references identified on Form PTO-1449 were cited in the text of the specification of the above-identified application or in the International Search Report for the

> I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231 on July 15, 2002.

> > Jennifer S. Austen (Name of Person Mailing Correspondence)

> > > 07/15/2002

international application. Copies of the International Search Report and references cited therein are not enclosed because the Notification of Acceptance of Application under 35 U.S.C. § 371 and 37 C.F.R. §§ 1.494 or 1.495, dated March 28, 2002, indicated that the International Search Report and references cited therein were received by the United States Patent and Trademark Office. The degree of relevance for each reference is as indicated in the International Search Report. Copies of the references cited in the specification are enclosed.

In the Reasoned Statement under Act 35(2) in the International Preliminary Examination Report, claims 1-10 have been considered to be novel, have an inventive step, and have industrial applicability. A courtesy copy of the International Preliminary Examination Report is also enclosed.

Pursuant to 37 C.F.R. § 1.97(b)(3), no fee is believed to be due for the submission of this Information Disclosure Statement as it is being submitted before the mailing date of a first Office Action on the merits. However, the Commissioner for Patents is hereby authorized to charge any fees which may be required to Deposit Account No. 23-0650. One (1) original and two (2) copies of this Information Disclosure Statement are enclosed.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.

Mand h Chym Richard L. Byrne

Registration No. 28,498

Attorney for Applicants

700 Koppers Building

436 Seventh Avenue

Pittsburgh, PA 15219-1818

Telephone No. 412.471.8815

Facsimile No. 412.471.4094

E-mail webblaw@webblaw.com



## INFORMATION DISCLOSURE STATEMENT STATEMENT BY APPLICANT

(Use several sheets if necessary)

•	ATT	Υ.	DC	C	KET	NO.
		23	64-	011	622	

SERIAL NO. 10/009,226

APPLICANT(S)
Dieter NAUMANN et al.

FILING DATE March 6, 2002

GROUP ART UNIT 3736

#### U.S. PATENT DOCUMENTS

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EXAMINER INITIAL	_	DOG	CUME	עע דע	MBER				DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5	7	3	4	5	8	7	03/31/1998	Backhaus et al.	364	498	
	АВ	5	1	6	8	1	6	2	12/01/1992	Oong et al.	250	339	
	AC	5	0	3	8	0	3	9	08/06/1991	Wong et al.	250	339	
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## FOREIGN PATENT DOCUMENTS

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AL	19	8	4	1	2	1	7	04/29/1999	Germany				х
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AN													
 AO									,				
AP													

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AO	Caughey et al., "Secondary Structure Analysis of the Scrapie-Associated Protein PrP 27-30 in Water by Infrared Spectroscopy,"
1.70	Biochemistry, Vol. 30, No. 31, pp. 7672-7680, May 1991.
	Goodacre et al., "Rapid Identification of Streptococcus and Enterococcus Species Using Diffuse Reflectance-Absorbance Fourier
AR	Transform Infrared Spectroscopy and Artificial Neural Networks," FEMS Microbiology Letters, Vol. 140, pp. 233-239, 1996.
	Kneipp et al., "Detection of Pathological Molecular Alterations in Scrapie-Infected Hamster Brain by Fourier Transform Infrared
AS	(FT-IR) Spectroscopy," Biochimica et Biophysica Acta, Vol. 1501, pp. 189-199, 2000.

EXAMINER

DATE CONSIDERED



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(Use several sheets if necessary)

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23	64-011622	

SERIAL NO. 10/009,226

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FILING DATE March 6, 2002 GROUP ART UNIT 3736

## **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUM	IENT NU	MBER	 		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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## FOREIGN PATENT DOCUMENTS

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	DOC	UMEN	T NUM	<b>ABER</b>		DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
 AL											
AM											
AN											
AO											
 ΑP											

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AQ	Naumann, "Infrared and NIR Raman Spectroscopy in Medical Microbiology," SPIE, Vol. 3257, pp. 245-255.
 	Diem et al., "Infrared Spectroscopy of Cells and Tissues: Shining Light onto a Novel Subject," Applied Spectroscopy, Vol. 53,
 AR	No. 4, pp. 148A-161A, 1999.
 7.	Helm et al., "Elaboration of a Procedure for Identification of Bacteria Using Fourier-Transform IR Spectral Libraries: A
AS	Stepwise Correlation Approach," J. of Micro. Methods, Vol. 14, pp. 127-142, 1991.

EXAMINER

DATE CONSIDERED



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EXAMINER INITIAL		DOCU	JMEN	T NUN	/BER	 		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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## FOREIGN PATENT DOCUMENTS

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SERIAL NO. 10/009,226

APPLICANT(S)

Dieter NAUMANN et al.

FILING DATE March 6, 2002 GROUP ART UNIT 3736

### U.S. PATENT DOCUMENTS

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## APPLICANT(S) Dieter NAUMANN et al.

FILING DATE March 6, 2002 GROUP ART UNIT
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## U.S. PATENT DOCUMENTS

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Dieter NAUMANN et al.

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EXAMINER

DATE CONSIDERED

PATENT APPLICATION/PCT Attorney Docket No. 2364-011622

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Dieter NAUMANN

METHOD FOR DIAGNOSING

Janina KNEIPP

TSE-INDUCED CHANGES IN TISSUES

Elizabeth BALDAUF

USING INFRARED SPECTROSCOPY

Peter LASCH

Michael BEEKES

International Application

No. PCT/DE00/01404

International Filing Date

03 May 2000

Priority Date Claimed

20 May 1999

Serial No. Not Yet Assigned

Filed Concurrently Herewith

Pittsburgh, Pennsylvania November 8, 2001

### PRELIMINARY AMENDMENT

Box PCT Commissioner for Patents Washington, D.C. 20231

Sir:

Prior to initial examination, please amend the above-identified patent application as follows:

### **IN THE SPECIFICATION:**

Please insert and delete section headings and amend specification paragraphs as follows. (Pursuant to 37 CFR 1.121, marked-up versions of the amended specification paragraphs are attached.)

On page 1, before the title, please delete the section heading "Description".

On page 1, after the title, at line 6, please insert the following section headings:

#### **BACKGROUND OF THE INVENTION**

## 1) Field of the Invention

Before the paragraph beginning at page 1, line 12, please insert the following section heading:

## 2) Brief Description of the Prior Art

Before the paragraph beginning at page 4, line 1, please insert the following section heading:

## SUMMARY OF THE INVENTION

Please replace the paragraph beginning at page 4, line 1, with the following rewritten paragraph:

It is thus the problem of this invention to provide a method for detecting TSE-induced pathologic changes in tissues. Said changes may be caused by scrapie, BSE, or any other of the TSE diseases. This problem is solved according to the invention by (a) directing infrared radiation to a tissue sample with pathologic changes caused by TSE, recording its spectral characteristics after irradiation and (b) comparing and classifying the infrared spectra thus obtained with a reference database containing infrared spectra of TSE-infected tissues and non-infected tissues.

Before the paragraph beginning at page 4, line 13, please insert the following section headings and specification paragraphs:

### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a flowchart of the method according to the present invention;

Fig. 2 is, in a first example of the present invention, a chart of two typical spectra of S- and N-tissue samples;

Fig. 3 is, in a second example of the present invention, a dendrogram of a specific hierarchical spectrum classification as calculated using Ward's algorithm;

Fig. 4A is, in a third example of the present invention, a dendogram calculated after data compression using principal component analysis; and

Fig. 4B, in the third example of the present invention, compares normed vector second derivations of sample spectra and differential spectra of normed vector S- and N-spectra.

## DETAILED DESCRIPTION OF THE INVENTION

## IN THE CLAIMS:

Please cancel claims 1-10 and rewrite them as new claims 11-30 as follows:

- 11. A method for diagnosing TSE-induced pathologic changes in tissues, said changes being caused by scrapie, BSE or another disease of the TSE group of diseases, comprising the steps of:
- (a) directing infrared radiation onto a tissue sample showing pathologic changes due to TSE, and that the spectral characteristics after interaction with the sample are recorded; and
- (b) comparing and classifying the infrared spectra thus obtained against a reference database that contains infrared spectra of TSE-infected and non-infected tissues.
- 12. The method according to claim 11, wherein said tissue sample is collected from one of the central nervous system, the peripheral nervous system and human organs.

Application No. 10/009,226 Paper Dated March 30, 2004

Reply to USPTO Correspondence of December 31, 2003

Attorney Docket No. 4521-011622

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/009,226

**Applicant** 

Dieter NAUMANN et al.

Filed

March 6, 2002

Title

METHOD FOR DIAGNOSING

TSE-INDUCED CHANGES IN TISSUES

USING INFRARED SPECTROSCOPY

Group Art Unit

1743

Examiner

Yelenag Gakh

Confirmation No.

5569

Customer No.

28289

## **AMENDMENT**

MAIL STOP NON-FEE AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Office Action, dated December 31, 2003, Applicants submit the following amendments and remarks.

Amendments to the SPECIFICATION begin on page 2 of this document.

Amendments to the CLAIMS begin on page 3 of this document.

Amendments to the DRAWINGS begin on page 8 of this document.

**REMARKS** begin on page 9 of this paper.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria., VA 22313-1450 on .March 30, 2004

Linda C. Seger

(Name of Person Mailing Paper)

Addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria., VA 22313-1450 on .March 30, 2004

Linda C. Seger

(Name of Person Mailing Paper)

Addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria., VA 22313-1450 on .March 30, 2004

Date

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Page 1 of 15

JAN 1 0 2005 22 Paper Dated March 30, 2004 Reply to USPTO Correspondence of December 31, 2003 Attorney Docket No. 4521-011622

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**

Claims 1-10 (Canceled)

- (Currently Amended) A method for diagnosing TSE induced transmissible spongiform encephalopathies-induced (TSE-induced) pathologic changes in tissues, said changes being caused by scrapie, BSE bovine spongiform encephalopathies (BSE) or another disease of the TSE group of diseases, comprising the steps of:
- (a) directing infrared radiation onto a tissue sample and recording showing pathologic changes due to TSE, and that the spectral characteristics after interaction with the sample are recorded; and
- (b) comparing and classifying the infrared spectra spectrum thus obtained against a reference database that contains infrared spectra of TSE-infected and non-infected tissues; and
- (c) classifying the infrared spectrum as a spectrum obtained from TSE-infected or non-infected tissues.
- The method according to claim W, wherein said tissue sample is collected from one of the central nervous system, the peripheral nervous system and human organs.

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